UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,029	09/16/2003	William Waycott	20612.002/P30632US01	4492
28381 ARNOLD & P	7590 05/03/2007 PORTER LLP		EXAMINER	
ATTN: IP DOCKETING DEPT. 555 TWELFTH STREET, N.W. WASHINGTON, DC 20004-1206			ROBINSON, KEITH O NEAL	
			ART UNIT	PAPER NUMBER
			1638	- 10
	. ,			
			MAIL DATE	DELIVERY MODE
•			05/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Assistant Communication	10/665,029	WAYCOTT, WILLIAM				
Office Action Summary	Examiner	Art Unit				
	Keith O. Robinson, Ph.D.	1638				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 22 Ja	Responsive to communication(s) filed on 22 January 2007 and 24 January 2007.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-3,5-9 and 38-56</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3,5-9 and 38-56</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1.☐ Certified copies of the priority documents have been received.						
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		•				
		.*				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/665,029 Page 2

Art Unit: 1638

STATUS OF THE APPLICATION

1. Applicant's appeal brief, filed January 22, 2007 has been received and entered in full; however, prosecution for this case has been re-opened and thus, the finality of the rejection of the last Office action has been withdrawn.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action mailed May 19, 2006. Applicant's arguments, filed January 24, 2007, have been received and entered in full.

The rejections have been withdrawn.

- 3. In the appeal brief filed January 22, 2007 claims 8 and 9 were incorrectly listed as being cancelled claims (see page 1, paragraph # 3). These claims are not cancelled and this was confirmed by Joseph Ricigliano on April 25, 2007.
- 4. Claims 1-3, 5-9 and 38-56 are under examination.

Terminal Disclaimer

5. The terminal disclaimer filed on January 24, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of February 10, 2004 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

6. Applicant's February 16, 2007 terminal disclaimer filing has rendered the obviousness-type double patenting rejection moot, as applied to claims 1-4 and 6-9 of the Office Action mailed May 19, 2006. The rejection has been withdrawn.

Art Unit: 1638

7. Applicant's arguments, see pages 2-3 of 'Remarks' filed January 24, 2007, regarding the 35 U.S.C. § 112, first paragraph rejection for enablement due to incomplete deposit information, have been considered and found persuasive. The rejection has been withdrawn.

Claim Rejections - 35 USC § 112, first paragraph – Written Description

8. Claims 1-3, 5-9, 46-48 and 51-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection is repeated for the reasons of record as set forth in the Office Action mailed May 19, 2006, as applied to claims 1-3, 5-7 and 41-56.

Applicant does not address the written description rejection in the 'Remarks' filed January 24, 2007; however, does address them in the Appeal Brief filed January 22, 2007 (see pages 4-8). In summary, Applicant states that Applicant was in possession of the claimed genera of lettuce plants and that one skilled in the art could readily recognize the claimed invention because it is an iceberg lettuce that contains a first leaf having a length to width ratio between about 1.2 and about 2.7 and a color in the range from about RHS 146A to about RHS 146B.

The claims are broadly drawn to any and all iceberg lettuce cultivars comprising a first leaf having a length to width ratio between about 1.2 and about 2.7 and a color in the range from about RHS 146A to about RHS 146B. See *Vas-Cath Inc. v. Mahurkar*

Art Unit: 1638

1991 (CA FC) 19 USPQ2d 1111, 1115, which teaches that the purpose of the written description is for the purpose of warning an innocent purchaser, or other person using a machine, of his infringement of the patent; and at the same time, of taking from the inventor the means of practicing upon the credulity or the fears of other persons, by pretending that his invention is more than what it really is, or different from its ostensible objects, that the patentee is required to distinguish his invention in his specification.

Applicant's specification discloses that Applicant is in possession of lettuce breeding lines PSR 6425 (see pages 16-18), PSR 6595 (see pages 18-20) and PSR 6032 (see pages 20-22); however, these lines are not claimed in claims 1-3, 5-9, 46-48 and 51-56.

See MPEP 2163(II)(3)(a) where it states, "[p]ossession may be shown in many ways. For example, possession may be shown by describing an actual reduction to practice of the claimed invention. Possession may also be shown by a clear depiction of the invention in detailed drawings or in structural chemical formulas which permit a person skilled in the art to clearly recognize that applicant had possession of the claimed invention. An adequate written description of the invention may be shown by any description of sufficient, relevant, identifying characteristics so long as a person skilled in the art would recognize that the inventor had possession of the claimed invention. See, e.g., Purdue Pharma L.P. v. Faulding Inc., 230 F.3d 1320, 1323, 56 USPQ2d 1481, 1483 (Fed. Cir. 2000)".

In the instant case, Applicant has shown possession of lettuce breeding lines PSR 6425, PSR 6595 and PSR 6032 by describing an actual reduction to practice of

Art Unit: 1638

said lines and by a clear depiction of how said lines where developed (see pages 16-22 of the specification).

New Claim Rejections - 35 USC § 112, first paragraph - Enablement

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-3, 5-9, 46-48 and 51-56 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for lettuce breeding lines PSR 6425, PSR 6595 and PSR 6032, does not reasonably provide enablement for all iceberg cultivars comprising a first outer leaf having a length to width ratio between 1.2 to about 2.7 and a color which ranges from about RHS 146A to about RHS 146B. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The claimed invention is not enabled because it is unclear how one skilled in the art would make the claimed invention. It is unclear if the claimed invention is produced by using one or more of lettuce breeding lines PSR 6425, PSR 6595 and PSR 6032 as a parent. The claim is broadly drawn to any green iceberg lettuce cultivar comprising a first outer leaf having a length to width ratio between about 1.2 to about 2.7; however, one skilled in the art would not know how to make and use the claimed invention without undue trial and error experimentation. One skilled in the art would not be able to use the instant specification because the instant specification teaches one skilled in the art how

Art Unit: 1638

to make lettuce breeding lines PSR 6425, PSR 6595 and PSR 6032 and not all green iceberg lettuce cultivars having a length to width ratio between about 1.2 to about 2.7.

11. Claims 38-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Though Applicant has provided the conditions regarding the deposit information (see pages 2-3 of 'Remarks' filed January 24, 2007), it is unclear which seeds are being deposited. It appears that the deposit is a mixed deposit. If the deposit is a mixed deposit, it is unclear how one skilled in the art would be able to distinguish the different seeds from each other.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 13. Claims 1, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Miltz (U.S. Patent No. 5,220,113, June 15, 1993). The claims read on an iceberg lettuce cultivar comprising a first outer leaf having a length to width ratio between about 1.2 to about 2.7 and a color which ranges from about RHS 146A to about RHS 146B, a

Art Unit: 1638

blanched inner leaf color, ranging from about RHS 145C to about RHS 145D and resistance to either corky root or lettuce mosaic virus.

Miltz discloses an iceberg lettuce cultivar, namely 'BUD 71-3', having a length to width ratio between about 1.2 to about 2.7, namely 1.5, and a color range from about RHS 146A to about RHS 146B, namely RHS 146B (see column 4, line 52 to column 5, line 4), a blanched inner leaf color, ranging from about RHS 145C to about RHS 145D (see column 1, line 53, wherein "creamy colored interiors" is interpreted as a color between RHS 145C (pale green) to about RHS 145D (white or blanched), as defined on page 2, paragraph 0006 of the specification), and resistance to corky root rot (see column 5, lines 42-44). See In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products. See In re Best, 195 USPQ 430, 433 (CCPA) 1997), which teaches that where the prior art product seems to be identical to the claimed product, except that the prior art is silent as to a particularly claimed characteristic or property, then the burden shifts to Applicant to provide evidence that the prior art would neither anticipate nor render obvious the claimed invention.

14. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Waycott et al (U.S. Patent No. 5,973,232, October 26, 1999). The claims read on an iceberg lettuce cultivar comprising a first outer leaf having a length to width ratio between about 1.2 to about 2.7 and a color which ranges from about RHS 146A to about RHS 146B.

Art Unit: 1638

Waycott et al disclose an iceberg lettuce cultivar, namely 'Sharp Shooter', comprising a length to width ratio between about 1.2 to about 2.7, namely 1.7, and a color which ranges from about RHS 146A to about RHS 146B, namely RHS 146A (see column 2, lines 27-28 and column 5, line 41). See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products. See *In re Best*, 195 USPQ 430, 433 (CCPA 1997), which teaches that where the prior art product seems to be identical to the claimed product, except that the prior art is silent as to a particularly claimed characteristic or property, then the burden shifts to Applicant to provide evidence that the prior art would neither anticipate nor render obvious the claimed invention.

Claim Rejections - 35 USC § 103

- 15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claims 1-3, 5-7, 41-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miltz (U.S. Patent No. 5,220,113, June 15, 1993), in view of Tillge (Seed Sci. & Technol. 12: 919-933, 1984), further in view of Bassett (J. Amer. Soc. Hort. Sci. 100(2): 104-105, 1975).

The claims read on an iceberg lettuce cultivar comprising a first outer leaf having a length to width ratio between about 1.2 to about 2.7 and a color which ranges from

Art Unit: 1638

about RHS 146A to about RHS 146B, a blanched inner leaf color, ranging from about RHS 145C to about RHS 145D and resistance to either corky root or lettuce mosaic virus, a spatulate leaf shape, elliptical stature and a semi-open head.

With regards to claims 1, 5, 7, 41-43, 45, 47-50, 53, 55 and 56, Miltz teaches an iceberg lettuce cultivar, namely 'BUD 71-3', having a length to width ratio between about 1.2 to about 2.7, namely 1.5, and a color range from about RHS 146A to about RHS 146B, namely RHS 146B (see column 4, line 52 to column 5, line 4), a blanched inner leaf color, ranging from about RHS 145C to about RHS 145D (see column 1, line 53, wherein "creamy colored interiors" is interpreted as a color between RHS 145C (pale green) to about RHS 145D (white or blanched), as defined on page 2, paragraph 0006 of the specification), and resistance to corky root rot (see column 5, lines 42-44).

Miltz does not teach a spatulate leaf shape, elliptical stature or semi-open head.

With regards to claims 2, 3, 41-43, 45, and 49-52, Tillge teaches that there is variation in lettuce morphology and that lettuce cultivars can have different morphological characteristics such as leaf color, leaf shape, etc. For example, Tillge teaches elliptical leaf shape (see pages 922 and 929). Thus, one of ordinary skill in the art would understand that various leaf shapes and statures could be produced by crossing lettuce varieties with desired traits.

With regards to claims 6, 41, 42, 45, 46, 50, 54 and 56, Bassett teaches lettuce having an open rosette, which is interpreted as a semi-open head (see page 104, 1st column, 4th paragraph). In addition, Bassett teaches that there is variation in lettuce length to width ratio and that heading types vary greatly depending upon the parental

lines used in the cross and are genetically controlled (see page 105, Table 3, page 104, 1st column, 1st paragraph and page 104, 1st column, 3rd paragraph, respectively). Thus, one of ordinary skill in the art would understand that various head types and lettuce length to width ratios could be produced by crossing lettuce varieties with desired traits.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the above teachings to produce the claimed invention because one of ordinary skill in the art would understand how to cross different lettuce varieties to produce lettuce cultivars with desired traits.

One of ordinary skill in the art would have been motivated to combine these teachings because Miltz teaches, "[I]ettuce... is a commercially important... crop... widely grown throughout the temperate and subtropical regions of the world, and is used predominately as a fresh green in the human diet" (see page column 1, lines 10-16) and Bassett teaches, "the large role L.I. [length to width ratio] plays in head formation may be useful in practical lettuce breeding...[s]electing on the basis of L.I. may be more effective than selection on the basis of overall appearance.

In addition, one of ordinary skill in the art would have reasonable expectation of success based on the success of Miltz in producing an iceberg lettuce cultivar having a length to width ratio between about 1.2 to about 2.7 and a color range from about RHS 146A to about RHS 146B and resistance to corky root rot, coupled with the teaching of Tillge's teachings of variation in lettuce morphology and the teachings of Bassett of variation in lettuce length to width ratio and the genetic control of lettuce head formation.

Conclusion

Application/Control Number: 10/665,029 Page 11

Art Unit: 1638

17. No claims are allowed.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is (571) 272-2918. The examiner can normally be reached on 7:30 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keith O. Robinson, Ph.D.

April 25, 2007

GEORGE C. ELLIOTT, DIRECTOR TECHNOLOGY CENTER 1600

Christopher bu Director TC1600 (acting)